

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: *Comb et al*  
ASSIGNEE: CELL SIGNALING TECHNOLOGY, INC.  
SERIAL NUMBER: Not yet assigned EXAMINER: Not yet assigned  
FILING DATE: Herewith ART UNIT: Not yet assigned  
FOR: PRODUCTION OF MOTIF-SPECIFIC AND CONTEXT-INDEPENDENT ANTIBODIES  
USING PEPTIDE LIBRARIES AS ANTIGENS

10/014495  
11/13/01  
1c760 U.S. PRO

Assistant Commissioner for Patents  
Washington, D.C. 20231

November 13, 2001  
Beverly, Massachusetts

INFORMATION DISCLOSURE STATEMENT

Pursuant to the duty of disclosure under 37 C.F.R. §§1.56, 1.97 and 1.98, Applicants hereby make of record the documents listed below and on the attached modified Form PTO-1449 (submitted in duplicate) in the above-identified application. The order of presentation of the references should not be construed as an indication of the importance of the references.

**U.S. Patent or Application Documents:**

CR	5,532,167	7/2/96	Cantley, et al
DA	09/535,364	3/24/00 (filed)	Comb, et al. (co-pending)
DB	09/148,712	9/4/98 (filed)	Comb, et al. (co-pending)

**Foreign Patent Documents:**

**Other Prior Art – Non Patent Literature Documents:**

Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	AA	Karin, Curr. Opin. Cell Biol. 6:415-424 (1994)
	AB	Lewis, et al., Adv. Cancer Res. 74:49-139 (1998)

APPLICANTS:  
U.S.S.N.:

Comb e.  
Not Yet Assigned

Attorney Docket No: CST-138CIP2

	AC	Crowley, et al., Cell 77:841-852 (1994)
	AD	Fukunaga et al., EMBO 16(8): 1921-1933 (1997)
	AE	Stukenberg et al., Curr. Bio. 7:338-348 (1997)
	AF	Burbelo et al., Curr. Biol. 5(2): 95-96 (1995)
	AG	Yaffe et al., Cell 91:961-971 (1997)
	AH	Muslin et al., Cell 84:889-897 (1996)
	AI	Struhl, Genes & Dev. 12:599-606 (1998)
	AJ	Imhof et al., Curr. Biol. 7:689-692 (1997)
	AK	Ross et al., Nature 294:654-656 (1981)
	AL	Kozma et al., Method. Enzymol. 201:28-43 (1991)
	AM	White et al., Method. Enzymol. 201:65-79 (1991)
	AN	Kamps, Method. Enzymol. 201:101-111 (1991)
	AO	Frackelton et al., Method. Enzymol. 201:79-92 (1991)
	AP	Wang, Method. Enzymol. 201:53-65 (1991)
	AQ	Glenney, Method. Enzymol. 201:92-100 (1991)
	AR	Heffetz et al., Method. Enzymol. 201:44-53 (1991)
	AS	Czernik et al., Method. Enzymol. 201:264-283 (1991)
	AT	Czernik et al., Neuroprot. 6:56-61 (1995)
	AU	Paterson & Garrels, Cell Biology: A Laboratory Handbook 249-257 (1994), Academic Press
	AV	Fields et al., Pept. Res. 4:95-101 (1991)
	AW	Dourtoglou et al., Synthesis 1984:572-574 (1984)
	AX	Knorr et al., Tetra. Let. 30:1927-1930 (1989)

	AY	Kearney et al., <i>J. Immunol.</i> 123:1548-1550 (1979)
	BA	Verhoeven, et al., <i>Science</i> 239:1534-1536 (1988)
	BB	Reichmann, et al., <i>Nature (England)</i> 332:323-327 (1988)
	BC	Huse, et al., <i>Science</i> 246:1275-1281 (1989)
	BD	Knorr, et al., <i>Peptides</i> 1988:37-39 (1989)
	BE	Hamaguchi, et al., <i>Molecular &amp; Cellular Biology</i> 8:3035-3042 (1988)
	BF	Sigma 1998 Catalog pages 1305 and 1309
	BG	Upstate Biotechnology 1998 Catalog page 17
	BH	Zymed Laboratories 1996-1997 General Catalog page 80
	BI	Monoclonal Antibodies, Hybridomas: A New Demision in Biological Analyses, Kennett et al. (eds.), Plenum Press (1980)
	BJ	Antibodies: A Laboratory Manual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988)
	BK	Methods in Enzymology, Vol. 201, Protein Phosphorylation, Part B Analysis of Protein Phosphorylation, Protein Kinase Inhibitors and Protein Phosphatases, Hunter and Sefton (eds.), Academic Press, Inc. (1991), pages 3-547
	BL	Songyang, et al., <i>Molecular and Cellular Biology</i> , 16:6486-6493 (1996)
	BM	Upstate Biotechnology 2001 Catalog, page 221
	BN	Cell Signaling Technology, 2000-2001 Catalog, page 14
	CA	Alessi, et al., <i>FEBS Lett.</i> 399:333-338 (1996)
	CB	Franke, et al. <i>Cell</i> 88:435-437
	CC	Pap, et al., <i>Bio. Chem.</i> 273:19929-19932 (1998)
	CD	Datta, et al., <i>Cell</i> 91:231-241 (1997)
	CE	Brunet, et al., <i>Cell</i> , 96:857-868 (1999)
	CF	Cardone, et al., <i>Science</i> , 282:1318-1321 (1998)
	CG	Montminy, <i>Annual Re. Biochem.</i> 66:807-822 (1997)

	CH	Songyang, et al., Current Biology 4:973-982 (1994)
	CI	Alessi, et al., EMBO J. 15:6541-6551 (1996)
	CJ	Dalby, et al., J. Biol. Chem. 273:1496-1505 (1998)
	CK	Keranen, et al., Curr. Biol., 5:1395-1403 (1995)
	CL	Peng, et al., Science, 277:1501-1508 (1997)
	CM	Zha, et al., Cell 87:619-628 (1996)
	CN	Westendorf, PNAS, 91:714-718 (1994)
	CO	Rosenberg, et al., Journal of Biological Chemistry 268:4499-4503 (1993)
	CP	Kushima, et al., Journal of Molecular Neuroscience 8:19-27 (1997)
	CQ	Yaffe et al., Science 278:1957-1960 (1997)
	CS	Cantley, Cell Signaling Technology Inc.'s 2000-2001 Catalogue page 198
	CT	Nishilawa et al., J. Biol. Chem. 272:952-960
	CU	Kemp et al., Trends Biochem. Sci. 15:342-346 (1990)
	CV	al-Obeid et al., Biopolymers 47:197-223 (1998)
	CW	Yaffe et al., Nature Biotech. 19:348-353 (2001)
	CX	Protein Phosphorylation: A Practical Approach, D. Hardie ed., p. 267, IRL Press (1993)

This Information Disclosure Statement is being filed:

- within three months of the filing date of the National Application;
- within three months of the filing date of the entry of the National Stage, as set forth in 37 C.F.R. §1.491, in an International Application; or
- before the mailing date of a first Office Action on the merits in the above-identified case.

Accordingly, no fee or certification is required. 37 C.F.R. §1.97.

APPLICANTS:  
U.S.S.N.:

Comb et al.  
Not Yet Assigned

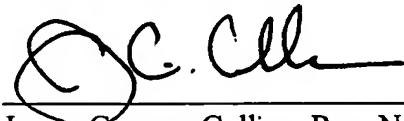
Attorney Docket No: CST-138CIP2

A copy of each of the above-identified information is enclosed unless otherwise indicated on the attached Form PTO-1449 (modified). It is respectfully requested that the Examiner consider completely the cited information, along with any other information, in reaching a determination concerning the patentability of the present claims, and signs the enclosed form PTO-1449 to evidence that the cited information has been fully considered by the Patent and Trademark Office during the examination of this application.

By submitting this Information Disclosure Statement, the Applicant makes no representation that: (1) a search has been performed, of the extent of any search performed, or that more relevant information does not exist; (2) the information cited in the Statement is, or is considered to be, material to patentability as defined in 37 C.F.R. §1.56(b); and (3) the information cited in the Statement is, or is considered to be, in fact, prior art as defined by 35 U.S.C. §102.

Notwithstanding any statements by the Applicant, the Examiner is urged to form his/her own conclusion regarding the relevance of the cited information. An early and favorable action is hereby requested. Please charge any additional fees that may be due, or credit any overpayment of same, to Deposit Account No. 50-1774, Reference No. CST-138 CIP2.

Respectfully submitted,



---

James Gregory Cullem, Reg. No. 43,569  
Intellectual Property Counsel  
CELL SIGNALING TECHNOLOGY, INC.  
166B Cummings Center  
Beverly, MA 01915  
(978) 867-2311

Dated: 11/13/01

Modified Form 1449/PTO		Application Number	Not yet assigned
		Filing Date	Herewith
		First Named Inventor	Comb <i>et al.</i>
		Group Art Unit	Not yet assigned
		Examiner Name	Not yet assigned
		Attorney Docket Number	CST-138 CIP2

11/13/01  
10/014485  
PTO

U.S. PATENT OR APPLICATION DOCUMENTS						
Exam Initials	Cite No.	U.S. Patent Document No.	Issue Date	Publication Date	Name of Patentee(s) or Applicant(s)	Co-Pending?
CR	5,532,167	7/2/96			Cantley, et al	
DA*	09/535,364		N/A		Comb <i>et al.</i>	Yes 3/24/2000
DB*	09/148,712		N/A		Comb <i>et al.</i>	Yes 9/4/1998

FOREIGN PATENT DOCUMENTS					
Exam Initials	Cite No.	Foreign Patent Document Office Number	Name of Patentee(s) or Applicant(s)	Date of Publication	Translation Yes No

OTHER NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
AA*		Karin, Curr. Opin. Cell Biol. 6:415-424 (1994)
AB*		Lewis, et al., Adv. Cancer Res. 74:49-139 (1998)
AC*		Crowley et al., Cell 77:841-852 (1994)
AD*		Fukunaga et al., EMBO 16(8): 1921-1933 (1997)
AE*		Stukenberg et al., Curr. Bio. 7:338-348 (1997)
AF*		Burbelo et al., Curr. Biol. 5(2): 95-96 (1995)
AG*		Yaffe et al., Cell 91:961-971 (1997)
AH*		Muslin et al., Cell 84:889-897 (1996)
AI*		Struhl, Genes & Dev. 12:599-606 (1998)

OTHER NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	AJ*	Imhof et al., Curr. Biol. 7:689-692 (1997)
	AK*	Ross et al., Nature 294:654-656 (1981)
	AL*	Kozma et al., Method. Enzymol. 201:28-43 (1991)
	AM*	White et al., Method. Enzymol. 201:65-79 (1991)
	AN*	Kamps, Method. Enzymol. 201:101-111 (1991)
	AO*	Frackelton et al., Method. Enzymol. 201:79-92 (1991)
	AP*	Wang, Method. Enzymol. 201:53-65 (1991)
	AQ*	Glenney, Method. Enzymol. 201:92-100 (1991)
	AR*	Heffetz et al., Method. Enzymol. 201:44-53 (1991)
	AS*	Czernik et al., Method. Enzymol. 201:264-283 (1991)
	AT*	Czernik et al., Neuroprot. 6:56-61 (1995)
	AU*	Paterson & Garrels, Cell biology: A Laboratory Handbook 249-257 (1994), Academic Press
	AV*	Fields et al., Pept. Res. 4:95-101 (1991)
	AW*	Dourtoglou et al., Synthesis 1984:572-574 (1984)
	AX*	Knorr et al., Tetra. Let. 30:1927-1930 (1989)
	AY*	Kearney et al., J. Immunol. 123:1548-1550 (1979)
	BA*	Verhoeven, et al. Science 239:1534-1536 (1988)
	BB*	Reichmann, et al., Nature (England) 332:323-327 (1988)
	BC*	Huse, et al., Science 246:1275-1281 (1989)
	BD*	Knorr, et al., Peptides 1988:37-39 (1989)
	BE*	Hamaguchi, et al., Molecular & Cellular Biology 8:3035-3042 (1988)

OTHER NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	BF*	Sigma 1998 Catalog pages 1305 and 1309
	BG *	Upstate Biotechnology 1998 Catalog page 17
	BH*	Zymed Laboratories 1996-1997 General Catalog page 80
	BI*	Monoclonal Antibodies, Hybridomas: A New Demision in Biological Analyses, Kennett et al. (eds.), Plenum Press (1980)
	BJ*	Antibodies: A Laboratory Manyual, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988)
	BK*	Methods in Enzymology, Vol. 201, Protein Phosphorylation, Part B Analysis of Protein Phosphorylation, Protein Kinase Inhibitors and Protein Phosphatases, Hunter and Sefton (eds.), Academic Press, Inc. (1991), pages 3-547
	BL*	Songyang, et al., Molecular and Cellular Biology, 16:6486-6493 (1996)
	BM*	Upstate Biotechnology 2001 Catalog, page 221
	BN*	Cell Signaling Technology, 2000-2001 Catalog, page 14
	CA*	Alessi, et al., FEBS Lett. 399:333-338 (1996)
	CB*	Franke, et al. Cell 88:435-437
	CC*	Pap, et al., Bio. Chem. 273:19929-19932 (1998)
	CD*	Datta, et al., Cell 91:231-241 (1997)
	CE*	Brunet, et al., Cell, 96:857-868 (1999)
	CF*	Cardone, et al., Science, 282:1318-1321 (1998)
	CG*	Montminy, Annual Re. Bochem. 66:807-822 (1997)
	CH*	Songyang, et al., Current Biology 4:973-982 (1994)
	CI*	Alessi, et al., EMBO J. 15:6541-6551 (1996)
	CJ*	Dalby, et al., J. Biol. Chem. 273:1496-1505 (1998)
	CK*	Keranen, et al., Curr. Biol., 5:1395-1403 (1995)
	CL*	Peng, et al., Science, 277:1501-1508 (1997)

OTHER NON PATENT LITERATURE DOCUMENTS		
Exam Initials	Cite No.	Name of Author, Title (when appropriate), Publication, Volume, Page(s), Date, Etc.
	CM*	Zha, et al., Cell 87:619-628 (1996)
	CN*	Westendorf, PNAS, 91:714-718 (1994)
	CO*	Rosenberg, et al., Journal of Biological Chemistry 268:4499-4503 (1993)
	CP*	Kushima, et al., Journal of Molecular Neuroscience 8:19-27 (1997)
	CQ*	Yaffe et al, Science 278:1957-1960 (1997)
	CS	Cantley, Cell Signaling Technology Inc.'s 2000-2001 Catalogue page 198
	CT ✓	Nishilawa et al., J. Biol. Chem. 272:952-960 (1990)
	CU ✓	Kemp et al., Trends Biochem. Sci. 15:342-346 (1990)
	CV ✓	Al-Obeid et al., Biopolymers 47:197-223 (1998)
	CW ✓	Yaffe et al., Nature Biotech. 19:348-353 (2001)
	CX ✓	Protein Phosphorylation: A Practical Approach, D. Hardie ed., p. 267, IRL Press (1993)

\* a copy of this reference is not provided as it was previously cited by or submitted to the office in a prior application, U.S.S.N. 09/535,364, filed 3/24/00 and 09/148,712, filed 9/04/98, and or is relied upon for an earlier filing date under 35 U.S.C. §120; 37 C.F.R. §1.98(d) (continuation, continuation-in-part, and divisional applications).

^ a copy of this reference is not provided as it is believed to be substantially cumulative of reference \_\_\_, submitted herewith. 37 C.F.R. §1.98(c).

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered.

Include copy of this form with next communication to applicant.